

ABSTRACT OF THE DISCLOSURE

Provided are a method and apparatus for determining a reference picture and a block mode for fast motion estimation. The method of determining a block mode includes determining motion vectors of respective first sub blocks of an input video data block by performing motion estimation on the video data block in a mode of the first sub blocks, and determining a block mode depending on whether the motion vectors are similar when it is determined there is no need to perform motion estimation on the video data block in a mode of second sub blocks that is smaller than the mode of the first sub blocks. Accordingly, it is possible to remarkably reduce a number of performing motion estimation by using result of motion estimation performed in a block mode, thereby enabling a reference picture and a block mode to be determined with less calculation.